

**THE INTERNATIONAL HELIUM COMPANY LIMITED**

11 King Street West : Suite 1010 : Toronto 1, Ontario, Canada : 362-1618

Cables: Helium Toronto

November 3, 1966.

To all Shareholders:

Dear Sir or Madam,

Re: Change of the Name of your Company to  
International Helium and Sulphur Company Limited

---

This is my first letter to you as Chairman of your Board and I hope you find it pleasant reading.

A Special General Meeting of Shareholders has been called for 10:30 a.m. in the Manitoba Room of the Royal York Hotel, Toronto, on November 15th, 1966, to change the name of the Company and to provide for additional working capital. The reason for the change of name at this time is that the Company has obtained an interest as described below in important sulphur concessions in Guatemala and Mexico, which make it evident that for many years to come the larger source of the Company's earnings will come from the sale of sulphur, though the development of the helium reserves will be vigorously pursued.

### **SULPHUR PROPERTIES**

#### **Guatemala**

Your company has acquired a 50% interest in a sulphur concession in Guatemala covering approximately 20,000 acres. Based on exploratory drilling on two separate deposits, engineers estimate the sulphur reserves at approximately 5,000,000 tons to date and it is expected that much larger quantities will be developed as further drilling is completed.

The Guatemala deposits are open pit operations requiring only excavation and flotation plant purification. Drillings indicate that a substantial quantity of the ore varies from 65% to 91% sulphur. This is an exceptionally high grade. A 300 ton per day flotation plant is now in transit from the manufacturer and is scheduled to leave Italy by ship November 16, 1966. This plant should be in operation by February 15, 1967. Shipment on another 2,000 ton per day flotation plant has started and this larger plant should be complete and in operation approximately 4 months later.

#### **Mexico**

Your Company owns a 34% interest (the maximum allowable by Mexican law) in a Mexican company, Operadora Anahuac, S.A., which recently purchased the rights to a sulphur concession in the Texistepec Dome. The sulphur reserves in this concession are estimated at approximately 5,000,000 tons and there are prospects of developing a much larger tonnage by additional drilling.

There are two promising sulphur concessions of approximately 20,000 acres on this same geological structure, one on each side of the concession purchased by your subsidiary. Various drillings and engineering studies have indicated that these adjacent concessions may have from 10,000,000 to 15,000,000 tons of sulphur. Our Mexican subsidiary (Operadora Anahuac, S.A.) is carrying out negotiations aimed at unitizing the production from these three concessions by the construction of a single large Frasch plant which we would operate. We hope to be in a position to make an official announcement regarding these negotiations in the near future. The construction of the Frasch plant is expected to take from 18 to 20 months.

### **FINANCES**

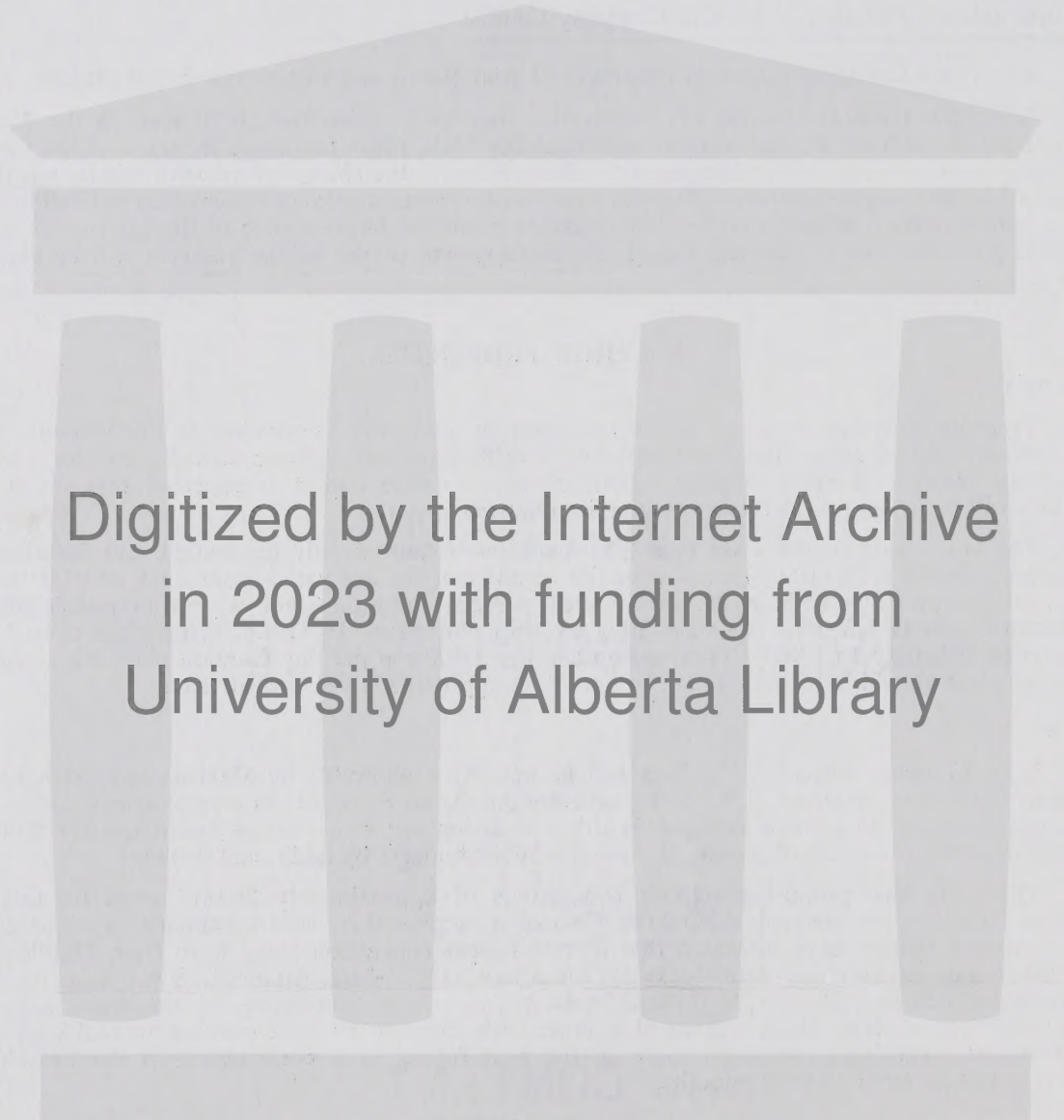
As you probably noticed from the Annual Report submitted earlier this week, the working capital of your company has been sadly depleted due to these activities. It has been all outgo and no income. To rectify this situation, a group of shareholders and other interested parties have agreed to subscribe at par an issue of between \$2,500,000. and \$3,000,000. of 7% convertible debentures, which, it is estimated, will be sufficient to provide for needed expenditure until we start receiving income from the sulphur deposits. This issue will also be submitted for shareholder approval at the forthcoming Special General Meeting of Shareholders, at which meeting I hope you will be present.

Yours sincerely,

"J. A. GAIRDNER"

Chairman of the Board.

JAG:NT



Digitized by the Internet Archive  
in 2023 with funding from  
University of Alberta Library

[https://archive.org/details/Inte0813\\_0000](https://archive.org/details/Inte0813_0000)



**THE INTERNATIONAL HELIUM COMPANY LIMITED**

11 King Street West • Suite 1010 • Toronto 1, Ontario, Canada • 362-1618

August 17th, 1966.

**PROGRESS REPORT**

To the Shareholders:

Considerable progress has been made by your company since the last meeting of shareholders held on June 10, 1966. The rapid pace of developments warrants more frequent communications with shareholders and your directors feel that you should be kept informed by periodic progress reports.

The company's newly-acquired sulphur interests in Mexico have provided the main focus of your management's activity.

A recently formed company, Operadora Anahuac, S.A., has now exercised a previously acquired option and has purchased large sulphur reserves formerly owned by Central Minera.

The new company has now taken possession of all existing plant and equipment as well as of the stockpile of 10,700 tons of sulphur which is ready for shipment. Taking advantage of the great demand for sulphur, your management has already arranged for the sale of this stockpile at a very advantageous price.

A fairly large number of employees has been hired and is at work renovating plant premises and placing equipment and vehicles in working condition. The company acquired a number of drilling rigs which are now being overhauled and which will be put to work shortly.

A new \$3,500,000 Frasch sulphur extraction plant with an annual capacity of 400,000 tons is now being designed in Toronto by Resources Engineering of Canada Limited. As soon as construction contracts are let, a tentative production start-up date will be established. Your management is confident that sulphur production will begin by the fall of 1967.

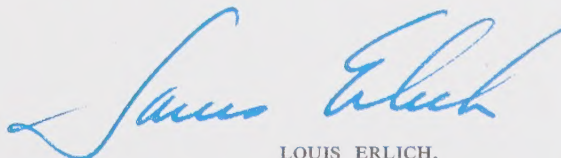
Operating through another subsidiary, Azufres Anahuac, S.A., your company has started an intensive exploration program. An aerial photographic survey of the entire known productive area of the Tehuantepec Isthmus has been completed and a team of geologists is now working in a crash effort to complete a sub-surface study of your company's properties as well as of the whole surrounding area. This work is being carried out under contract by Ifex Geotecnica S.A., of Mexico City, a highly regarded firm of engineers specializing in geophysical surveys.

The company's own engineering personnel is being flown to Mexico from Canada to coordinate the exploration efforts of Ifex and to supervise local labour engaged in technical tasks, road repairs and clearing of mine and plant sites.

As to your company's helium property in Saskatchewan, Resources Engineering of Canada Limited are well advanced in the design of a helium extraction plant. A site has been selected in the vicinity of the company's two wells in the Wood Mountain area. The plant is being designed to produce 40 million cubic feet of helium per year and it is expected that construction contracts will be let shortly.

Your management is well satisfied with the progress to date and will keep you informed of further developments.

On behalf of the board of directors.



LOUIS ERLICH,  
President.





from:

Edward Parker Public Relations,  
159 Bay St., Toronto, Ontario.

on behalf of

INTERNATIONAL HELIUM COMPANY LIMITED,  
Suite 405, 25 Adelaide Street West,  
Toronto, Canada

RELEASE ON RECEIPT

Tuesday, January 11, 1966

Significant strengthening of International Helium Company's financial position is reported by Louis Erlich, president.

Following the annual meeting yesterday of Apache Oil and Helium Corp., a U.S. company controlled by International Helium, Mr. Erlich emphasized these developments:

. A rights offering to International Helium shareholders has been 100% subscribed, grossing the company \$1,216,000.

. Apache Oil shareholders have approved a proposed settlement with Kerr-McGee Oil Company effectively terminating litigation relating to a dispute on Apache's net profits interest.

Result of the proposed settlement would be that, after repaying advances totalling approximately \$350,000--advanced by Kerr-McGee for Apache's account--as well as accrued operating expenses, Apache would receive approximately \$400,000 cash. Apache would also receive, for the life of the properties, approximately \$200,000 annually as its net share, based on the average volume of helium sales from the Arizona plant in the past year.

Overall effect of these developments puts International Helium and its subsidiaries in a strong financial position, with no short term debt, and lengthens the company's line of credit. Financial arrangements have been completed to buy minority producing interests in petroleum properties in Texas and Louisiana where the company is operator.

"Acquisition of these interests, added to the majority interests already held, will greatly expand Helium's oil and gas income," Mr. Erlich said.

Mr. Erlich also announced that the directors are now studying possible consolidation of subsidiary interests in order to streamline operations and gain tax advantages.





from: Edward Parker Public Relations  
159 Bay St., Toronto, 363-1385

On behalf of:

The International Helium Company Limited  
11 King Street West, Toronto 1, Ont.

*file*  
FOR RELEASE ON RECEIPT  
Thursday, April 21/66

The board of directors of The International Helium Company Limited has authorized an immediate start on design and construction of a helium extraction plant in Saskatchewan with an annual capacity of 40 million cubic feet, it is announced by Louis Erlich, president.

The project has already commenced under the direction of James. K. LaFleur, president of Industrial Cryogenics Inc. of Hermosa Beach, California, who has been retained by International Helium as consultant in charge of design and engineering of the plant. Mr. LaFleur is an international authority on low temperature industrial gas technology.

"Our decision on plant capacity was based on a recently completed world-wide study of helium markets," Mr. Erlich said.

Preliminary bids from potential contractors for the custom-built plant are already being received, but actual fabrication of equipment will await completion of design, which is expected this summer.

"Following selection of the plant site, for which negotiations are now underway, on-site improvements and workmen facilities will be required prior to installation of the plant itself," Mr. Erlich noted.

The plant site will be near International Helium's two wells in the Wood Mountain area of southwestern Saskatchewan, with proven and probable reserves of approximately three quarters of a billion cubic feet of helium.

.....more





2.....

These reserve estimates cover only 2,300 acres surrounding the two wells. However, the company holds leases totalling 67,000 acres in the same area, in which several promising structures exist, and it will actively seek to augment its reserves through further exploration there, Mr. Erlich said.

Present helium prices on world markets range from a minimum of \$35 per thousand cubic feet in the U.S. (f.o.b. plant) to between \$200 and \$300 per thousand cubic feet, depending upon quantity and location. There are no known economic reserves of helium outside of North America.





# THE INTERNATIONAL HELIUM COMPANY LIMITED

SUITE 1010, MONTREAL TRUST TOWER

11 KING STREET WEST

TORONTO 1

*file*  
*11th Floor*  
*Room 30*  
*Trade*

To: The Shareholders of  
THE INTERNATIONAL HELIUM COMPANY LIMITED

Last February negotiations commenced with officials of Gairpark Enterprises Limited (Gairpark) regarding the possible participation of your Company in the acquisition and development of properties in the Mexican Sulphur Reserve which Gairpark and another company, Gairloch Investments Limited (Gairloch) at that time were in the process of acquiring from the Mexican owners in accordance with a plan of acquisition as authorized and approved by the Mexican Government. Both Gairpark and Gairloch are companies controlled by Mr. J. A. Gairdner of Toronto, a well known Canadian financier.

Arising out of these negotiations, an agreement was reached with Gairpark on May 3, 1966, under which your Company would acquire from Gairpark (1) a 34% interest in Azufres Anahuac, S.A., a Mexican exploration company and (2) an assignment of an option to purchase proven sulphur reserves from Operadora Central Minera, in return for 3,282,418 fully paid, non-assessable shares of your Company (which amount will represent, after issuance,  $\frac{1}{3}$  of the total equity of your Company. A substantial amount of these shares will be placed in escrow subject to release only with the consent of the Toronto Stock Exchange.

## Information Regarding Azufres Anahuac, S.A.

Azufres Anahuac, S.A. was organized with the permission of the Mexican Government to explore for sulphur in the Mexican Sulphur Reserve. In accordance with Mexican law, companies organized to do exploration in National Reserves must be 66% Mexican owned. To provide for this, two classes of shares of Azufres Anahuac, S.A. are issued divided into Class A and Class B shares. The Class A shares comprising 66% of the equity are restricted in transfer rights so that they may be owned only by Mexican citizens or certain qualified Mexican financial institutions. On the other hand, the Class B shares, comprising 34% of the equity, are marked "Free Subscription", and may be owned by anyone, regardless of Nationality, except they cannot be owned by foreign governments. The entire block of Class B shares will be owned by International Helium under this transaction. At the present time, there are 13,200 Class A shares and 6,800 Class B shares of Azufres Anahuac, S.A. outstanding, being all of the authorized shares. All shares are equally subject to call for the balance of the subscription price with the approval of both classes of shareholders. Mexican law requires the capital of a business corporation to be fully subscribed. If default is made by the holder of shares in paying the amount of any call, the issuing company may take legal action against the holder for the amount owing or in the alternative, treat the shares as being unsubscribed.

Azufres Anahuac, S.A. was organized with a capital of 20,000,000 pesos of which 5,000,000 pesos (\$400,000.00 U.S.) has been paid in for subscribed capital to date. At the present time, a Mexican peso has a value of 8¢ in U.S. funds. Azufres Anahuac, S.A. has no liabilities and the entire capital of 5,000,000 pesos (\$400,000.00 U.S.) is available for use in its exploration programme.

## Information Regarding Operadora Central Minera

Operadora Central Minera is a successor company to Central Minera, S.A. which was a subsidiary of Texas International Sulphur Company. Financial difficulties contributed to by the promoters plagued this Company from the very beginning. A small plant was constructed out of second hand equipment and Mr. Ebarb, the former manager, stated that the plant was never able to produce more than 50% of its rated capacity of hot water so that the dome could never reach proper temperature. Nevertheless, sufficient operating experience was obtained in the 17,000 tons of sulphur produced to determine that the Frasch process was workable in this dome. In the meantime,

the company had exhausted its funds. The workers had not been paid for months. The prevailing price of sulphur at the time dropped below \$20.00 a ton, and eventually reached \$16.00 per ton. As a result, the company was placed in bankruptcy despite the encouraging deposit of known sulphur. The litigation regarding the company and its bankruptcy continued until April, 1966 when the ownership was decided in a Supreme Court Decision. Your company's interest was protected since Gairpark had reached agreement with not only Operadora Central Minera, but the Workers' Union, and the original Central Minera, S.A. who will receive payment of outstanding claims out of the option price. Despite the extreme shortage of sulphur, it heretofore has not been possible to put this concession to work until the litigation was settled. The option with Operadora Central Minera calls for the formation of a new company, to be called Operadora Azufres Anahuac, S.A. The new company is to be organized with a capital of 25,000,000 pesos of which your company will subscribe 34% for the entire block of Series B free subscription shares. Certain Mexican Nationals have made commitments to acquire all of the Series A shares for \$1,320,000.00 U.S. so that the new company, Operadora Azufres Anahuac, S.A. will have \$2,000,000.00 of paid up capital.

The new company will then exercise its option to purchase sulphur reserves and properties and equipment from Operadora Central Minera for \$700,000.00 U.S.

Included in this purchase price is 10,700 tons of sulphur stockpiled above ground and all mining equipment and plant of the predecessor company. The sulphur is worth \$500,000.00 and the plant and equipment as a minimum a like amount.

The option further calls for the new company, Operadora Azufres Anahuac, S.A., to construct a Frasch extraction plant having a capacity of 1,000 to 1,400 tons per day of sulphur. The estimated cost to construct the plant is approximately \$3,500,000.00 and it is interesting to note that the Mexican Government will guarantee loans of up to 85% of the cost of this type of plant or in our case to the extent of \$3,000,000.00. It should be noted, however, that the Company proposes to purchase in Canada materials and equipment to the extent available and finance such purchases through the Exports Credit Agency of the Canadian Government as the cost of such financing will be much more favourable. The plant will service the known deposit of sulphur and when and if additional deposits are discovered, additional plants will be constructed. The plant has been sized to produce approximately 400,000 tons per year of sulphur which will be within the allowance export quota based on the known reserves. A canal has been constructed to the concession limits and the property is serviced by rail.

### Potential of Operadora Central Minera Properties

The concessions and contracts owned by Operadora Central Minera are in four separate parcels totalling 15,000 acres. DeGolyer and MacNaughton Incorporated, one of the world's leading firms of geologists located in Dallas, Texas, prepared a report on one of the parcels which reads as follows:

"The estimated sulphur reserves of Lot 5-A of the Texistepec Dome are summarized as follows:

	LONG TONS OF SULPHUR	
	In Place	Recoverable
Proved .....	2,904,000	2,033,000
Probable .....	595,000	417,000
Possible .....	590,000	413,000
	<hr/> 4,089,000	<hr/> 2,863,000"

This report, after studying in detail the geology of the deposit, and the permeability of the cores, shows an estimated recovery rate at 70%.

A further report by Engineer Guillermo Salas, who is Chief Geologist of Fomento Minero (the Department of Mines of the Mexican Government) in his report on the explorations by Central Minera, S.A. from September 1955 to September 1956 in respect of the Textistepec Dome states as follows:

"Having drilled the following holes: 2, 3, 4, 5, 8, 9, 11, 12, 13, 24 and 25, it was possible to block out or measure a bed of sulphur containing a commercial quantity of more than 5,000,000 tons."

There are three other favourable domes yet to be explored. Both DeGolyer and MacNaughton, and Engineer Salas recommend additional exploration work to prove up additional reserves in the Central Minera concession.



Engineer Salas reports that the Chinameca Dome is even more interesting geologically than the dome reported on by DeGolyer and MacNaughton and is approximately 20 times larger in area. Your Directors, after review of this information, and after a personal visit to DeGolyer and MacNaughton's office in Dallas by the writer to review the data, are of the opinion that the potential for new sulphur discoveries is very high.

Dr. G. C. Monture, a distinguished Canadian Geologist-Economist, was engaged by your Company to review the data of DeGolyer and MacNaughton, and Engineer Salas. Dr. Monture visited the offices of DeGolyer and MacNaughton to review all technical data. He also visited the former Manager of Central Minera and discussed in detail with him the operating characteristics of the dome, including the methods used in the separation of the heavy tar substances from the sulphur. As a result of these discussions and working in conjunction with Mr. A. J. Leighton, Vice-President of Resources Engineering of Canada, Dr. Monture estimated the operating cost of the sulphur extraction process at between \$12.00 to \$19.15 per ton depending upon whether natural gas or Bunker C Fuel Oil was used as a fuel for the hot water required by the Frasch Process. This figure includes depreciation, movement of sulphur to the dock, and a reasonable allowance for sales expense. Dr. Monture has issued the following report:

**G. C. MONTURE, O.B.E., B.Sc., D.Sc.**  
**123 Fentiman Avenue**  
**Ottawa 1**

May 30, 1966

THE INTERNATIONAL HELIUM COMPANY LIMITED,  
Suite 1010, Montreal Trust Tower,  
11 King Street West,  
Toronto 1

DEAR SIRs:

I wish to confirm to you information given you by Mr. A. J. Leighton of Resources Engineering of Canada Limited regarding economics of operation of Central Minera property. At the request of your President, I personally visited the office of DeGolyer and MacNaughton in Dallas, Texas, and discussed with their experts the geology of the Texistepec Dome and I followed this up with discussions with Mr. Ebarb, the former Manager of the old Central Minera Company, who operated the Frasch plant which was built on that property.

I have reviewed the estimates of reserves prepared by DeGolyer and MacNaughton and believe them to be conservative. Based on this information and using a conservative estimate for the water rate, I estimate that operating costs for extracting sulphur would not be more than \$19.15 per ton of sulphur and could be considerably less if natural gas were used as fuel.

The selling price of sulphur f.o.b. Mexico has been reliably reported to be between \$43.00 and \$50.00 per ton depending on quantity and terms of delivery. At this selling price, gross profit per ton before income tax should be approximately \$25.00 per ton and with a production of 400,000 tons per year would reflect a per year profit before taxes of \$10,000,000.00.

Yours faithfully,

"G. C. MONTURE"

---

It is interesting to note that Moody's Investor's Services Report on the cost of sales and production of Pan American Sulfur and Gulf Sulfur which are actually located on different highs of the same dome or structure in the Isthmus of Mexico. This report shows that the total cost of sales of the two companies including production and selling expenses and the U.S. company's home office expense ranges from \$16.55 to \$19.45 per long ton. This checks closely with the estimate of Dr. Monture and Mr. A. J. Leighton. Your Directors are of the opinion that operating cost and results in these properties should be substantially the same as those of Pan American Sulfur and Gulf Sulfur inasmuch as the properties are located on the same geological feature, and will produce from the same general formation.

The amount to be exported in each year is determined on the basis of the figure of the Chief Geologist of the Mexican Government, Mr. Salas, as to commercial sulphur reserves and a maximum of 10% of such may be

exported in any year. Your Company's interest in the revenues to be received by Operadora Central Minera will be to the extent of its 34% share interest.

### **Information on Sulphur Markets**

The price of sulphur has increased rapidly in the past two years. The growth in population of the world and the increasing demand for fertilizer quickly eliminated all surplus stocks and urgent steps are being taken to increase production. Chemical Week, issue of February 12, 1966 reports that no slow down in demand of sulphur is in sight. Mexico is one of the few places where production can be expanded from known sulphur deposits. Your Directors have been offered \$53.75 per ton for sulphur in 10,000 ton lots, and \$43.00 per ton in 150,000 ton lots at a Mexican port. Therefore, the gross profit per ton of sulphur mined would be approximately \$25.00 per ton at current prices.

### **Financing of Helium Extraction Plant**

Gairloch Investments Limited has entered into an option agreement exercisable prior to June 11, 1966 to acquire all of the issued shares of our Company owned by Coast Exploration Company, being a minimum of 2,000,000 shares and a maximum of 2,400,000 shares. These shares presently reflect control of our company. If Gairloch exercises this option it has agreed forthwith to finance or arrange financing for construction of the Company's helium extraction plant in Saskatchewan which will have a capacity of 40,000,000 cubic feet a year with a cost of \$2,000,000.00 to construct and furnish with all necessary equipment to bring the plant into production.

### **General Information**

Your Directors are of the opinion that the net earnings of your Company will be increased by approximately \$2,000,000.00 per year as a result of the operation of the Frasch sulphur plant on the known deposit. Any additional discovery will, of course, materially improve these earnings. This estimate has been prepared based on Dr. Monture and Mr. Leighton's estimate of operating cost and a general knowledge of the world price for sulphur.

A general commitment has been made to the Mexican Government to construct a fertilizer plant at a freeport in Mexico when and if exports of sulphur from Azufres Anahuac, S.A. exceed one million tons per year.

We have been informed by our tax advisers that dividends from a Mexican corporation to a Canadian corporation which owns more than 26% of the shares of the Mexican corporation are received in Canada tax free by the Canadian corporation.

Your Directors feel that with completion of the matters referred to above the Company, in addition to attaining significance in the world sulphur industry, will be controlled by reputable experienced persons who have access to all necessary financing to maintain the Company as a major producer with the opportunity to acquire further interests in the exploration and development of natural resources products as the occasion may arise from time to time.

Your Board of Directors has given unanimous approval to the transactions contemplated above.

"LOUIS ERLICH",  
*President.*

Toronto, Ontario  
May 30, 1966





# THE INTERNATIONAL HELIUM COMPANY LIMITED

SUITE 1010, MONTREAL TRUST TOWER

11 KING STREET WEST

TORONTO 1

To: The Shareholders of  
THE INTERNATIONAL HELIUM COMPANY LIMITED

Last February negotiations commenced with officials of Gairpark Enterprises Limited (Gairpark) regarding the possible participation of your Company in the acquisition and development of properties in the Mexican Sulphur Reserve which Gairpark and another company, Gairloch Investments Limited (Gairloch) at that time were in the process of acquiring from the Mexican owners in accordance with a plan of acquisition as authorized and approved by the Mexican Government. Both Gairpark and Gairloch are companies controlled by Mr. J. A. Gairdner of Toronto, a well known Canadian financier.

Arising out of these negotiations, an agreement was reached with Gairpark on May 3, 1966, under which your Company would acquire from Gairpark (1) a 34% interest in Azufres Anahuac, S.A., a Mexican exploration company and (2) an assignment of an option to purchase proven sulphur reserves from Operadora Central Minera, in return for 3,282,418 fully paid, non-assessable shares of your Company (which amount will represent, after issuance,  $\frac{1}{3}$  of the total equity of your Company. A substantial amount of these shares will be placed in escrow subject to release only with the consent of the Toronto Stock Exchange.

## Information Regarding Azufres Anahuac, S.A.

Azufres Anahuac, S.A. was organized with the permission of the Mexican Government to explore for sulphur in the Mexican Sulphur Reserve. In accordance with Mexican law, companies organized to do exploration in National Reserves must be 66% Mexican owned. To provide for this, two classes of shares of Azufres Anahuac, S.A. are issued divided into Class A and Class B shares. The Class A shares comprising 66% of the equity are restricted in transfer rights so that they may be owned only by Mexican citizens or certain qualified Mexican financial institutions. On the other hand, the Class B shares, comprising 34% of the equity, are marked "Free Subscription", and may be owned by anyone, regardless of Nationality, except they cannot be owned by foreign governments. The entire block of Class B shares will be owned by International Helium under this transaction. At the present time, there are 13,200 Class A shares and 6,800 Class B shares of Azufres Anahuac, S.A. outstanding, being all of the authorized shares. All shares are equally subject to call for the balance of the subscription price with the approval of both classes of shareholders. Mexican law requires the capital of a business corporation to be fully subscribed. If default is made by the holder of shares in paying the amount of any call, the issuing company may take legal action against the holder for the amount owing or in the alternative, treat the shares as being unsubscribed.

Azufres Anahuac, S.A. was organized with a capital of 20,000,000 pesos of which 5,000,000 pesos (\$400,000.00 U.S.) has been paid in for subscribed capital to date. At the present time, a Mexican peso has a value of 8¢ in U.S. funds. Azufres Anahuac, S.A. has no liabilities and the entire capital of 5,000,000 pesos (\$400,000.00 U.S.) is available for use in its exploration programme.

## Information Regarding Operadora Central Minera

Operadora Central Minera is a successor company to Central Minera, S.A. which was a subsidiary of Texas International Sulphur Company. Financial difficulties contributed to by the promoters plagued this Company from the very beginning. A small plant was constructed out of second hand equipment and Mr. Ebarb, the former manager, stated that the plant was never able to produce more than 50% of its rated capacity of hot water so that the dome could never reach proper temperature. Nevertheless, sufficient operating experience was obtained in the 17,000 tons of sulphur produced to determine that the Frasch process was workable in this dome. In the meantime,



the company had exhausted its funds. The workers had not been paid for months. The prevailing price of sulphur at the time dropped below \$20.00 a ton, and eventually reached \$16.00 per ton. As a result, the company was placed in bankruptcy despite the encouraging deposit of known sulphur. The litigation regarding the company and its bankruptcy continued until April, 1966 when the ownership was decided in a Supreme Court Decision. Your company's interest was protected since Gairpark had reached agreement with not only Operadora Central Minera, but the Workers' Union, and the original Central Minera, S.A. who will receive payment of outstanding claims out of the option price. Despite the extreme shortage of sulphur, it heretofore has not been possible to put this concession to work until the litigation was settled. The option with Operadora Central Minera calls for the formation of a new company, to be called Operadora Azufres Anahuac, S.A. The new company is to be organized with a capital of 25,000,000 pesos of which your company will subscribe 34% for the entire block of Series B free subscription shares. Certain Mexican Nationals have made commitments to acquire all of the Series A shares for \$1,320,000.00 U.S. so that the new company, Operadora Azufres Anahuac, S.A. will have \$2,000,000.00 of paid up capital.

The new company will then exercise its option to purchase sulphur reserves and properties and equipment from Operadora Central Minera for \$700,000.00 U.S.

Included in this purchase price is 10,700 tons of sulphur stockpiled above ground and all mining equipment and plant of the predecessor company. The sulphur is worth \$500,000.00 and the plant and equipment as a minimum a like amount.

The option further calls for the new company, Operadora Azufres Anahuac, S.A., to construct a Frasch extraction plant having a capacity of 1,000 to 1,400 tons per day of sulphur. The estimated cost to construct the plant is approximately \$3,500,000.00 and it is interesting to note that the Mexican Government will guarantee loans of up to 85% of the cost of this type of plant or in our case to the extent of \$3,000,000.00. It should be noted, however, that the Company proposes to purchase in Canada materials and equipment to the extent available and finance such purchases through the Exports Credit Agency of the Canadian Government as the cost of such financing will be much more favourable. The plant will service the known deposit of sulphur and when and if additional deposits are discovered, additional plants will be constructed. The plant has been sized to produce approximately 400,000 tons per year of sulphur which will be within the allowance export quota based on the known reserves. A canal has been constructed to the concession limits and the property is serviced by rail.

### Potential of Operadora Central Minera Properties

The concessions and contracts owned by Operadora Central Minera are in four separate parcels totalling 15,000 acres. DeGolyer and MacNaughton Incorporated, one of the world's leading firms of geologists located in Dallas, Texas, prepared a report on one of the parcels which reads as follows:

"The estimated sulphur reserves of Lot 5-A of the Texistepec Dome are summarized as follows:

	LONG TONS OF SULPHUR	
	In Place	Recoverable
Proved .....	2,904,000	2,033,000
Probable .....	595,000	417,000
Possible .....	590,000	413,000
	4,089,000	2,863,000"

This report, after studying in detail the geology of the deposit, and the permeability of the cores, shows an estimated recovery rate at 70%.

A further report by Engineer Guillermo Salas, who is Chief Geologist of Fomento Minero (the Department of Mines of the Mexican Government) in his report on the explorations by Central Minera, S.A. from September 1955 to September 1956 in respect of the Texistepec Dome states as follows:

"Having drilled the following holes: 2, 3, 4, 5, 8, 9, 11, 12, 13, 24 and 25, it was possible to block out or measure a bed of sulphur containing a commercial quantity of more than 5,000,000 tons."

There are three other favourable domes yet to be explored. Both DeGolyer and MacNaughton, and Engineer Salas recommend additional exploration work to prove up additional reserves in the Central Minera concession.



Engineer Salas reports that the Chinameca Dome is even more interesting geologically than the dome reported on by DeGolyer and MacNaughton and is approximately 20 times larger in area. Your Directors, after review of this information, and after a personal visit to DeGolyer and MacNaughton's office in Dallas by the writer to review the data, are of the opinion that the potential for new sulphur discoveries is very high.

Dr. G. C. Monture, a distinguished Canadian Geologist-Economist, was engaged by your Company to review the data of DeGolyer and MacNaughton, and Engineer Salas. Dr. Monture visited the offices of DeGolyer and MacNaughton to review all technical data. He also visited the former Manager of Central Minera and discussed in detail with him the operating characteristics of the dome, including the methods used in the separation of the heavy tar substances from the sulphur. As a result of these discussions and working in conjunction with Mr. A. J. Leighton, Vice-President of Resources Engineering of Canada, Dr. Monture estimated the operating cost of the sulphur extraction process at between \$12.00 to \$19.15 per ton depending upon whether natural gas or Bunker C Fuel Oil was used as a fuel for the hot water required by the Frasch Process. This figure includes depreciation, movement of sulphur to the dock, and a reasonable allowance for sales expense. Dr. Monture has issued the following report:

**G. C. MONTURE, O.B.E., B.Sc., D.Sc.**  
**123 Fentiman Avenue**  
**Ottawa 1**

May 30, 1966

THE INTERNATIONAL HELIUM COMPANY LIMITED,  
Suite 1010, Montreal Trust Tower,  
11 King Street West,  
Toronto 1

DEAR SIRs:

I wish to confirm to you information given you by Mr. A. J. Leighton of Resources Engineering of Canada Limited regarding economics of operation of Central Minera property. At the request of your President, I personally visited the office of DeGolyer and MacNaughton in Dallas, Texas, and discussed with their experts the geology of the Texistepec Dome and I followed this up with discussions with Mr. Ebarb, the former Manager of the old Central Minera Company, who operated the Frasch plant which was built on that property.

I have reviewed the estimates of reserves prepared by DeGolyer and MacNaughton and believe them to be conservative. Based on this information and using a conservative estimate for the water rate, I estimate that operating costs for extracting sulphur would not be more than \$19.15 per ton of sulphur and could be considerably less if natural gas were used as fuel.

The selling price of sulphur f.o.b. Mexico has been reliably reported to be between \$43.00 and \$50.00 per ton depending on quantity and terms of delivery. At this selling price, gross profit per ton before income tax should be approximately \$25.00 per ton and with a production of 400,000 tons per year would reflect a per year profit before taxes of \$10,000,000.00.

Yours faithfully,

"G. C. MONTURE"

---

It is interesting to note that Moody's Investor's Services Report on the cost of sales and production of Pan American Sulfur and Gulf Sulfur which are actually located on different highs of the same dome or structure in the Isthmus of Mexico. This report shows that the total cost of sales of the two companies including production and selling expenses and the U.S. company's home office expense ranges from \$16.55 to \$19.45 per long ton. This checks closely with the estimate of Dr. Monture and Mr. A. J. Leighton. Your Directors are of the opinion that operating cost and results in these properties should be substantially the same as those of Pan American Sulfur and Gulf Sulfur inasmuch as the properties are located on the same geological feature, and will produce from the same general formation.

The amount to be exported in each year is determined on the basis of the figure of the Chief Geologist of the Mexican Government, Mr. Salas, as to commercial sulphur reserves and a maximum of 10% of such may be



exported in any year. Your Company's interest in the revenues to be received by Operadora Central Minera will be to the extent of its 34% share interest.

### **Information on Sulphur Markets**

The price of sulphur has increased rapidly in the past two years. The growth in population of the world and the increasing demand for fertilizer quickly eliminated all surplus stocks and urgent steps are being taken to increase production. Chemical Week, issue of February 12, 1966 reports that no slow down in demand of sulphur is in sight. Mexico is one of the few places where production can be expanded from known sulphur deposits. Your Directors have been offered \$53.75 per ton for sulphur in 10,000 ton lots, and \$43.00 per ton in 150,000 ton lots at a Mexican port. Therefore, the gross profit per ton of sulphur mined would be approximately \$25.00 per ton at current prices.

### **Financing of Helium Extraction Plant**

Gairloch Investments Limited has entered into an option agreement exercisable prior to June 11, 1966 to acquire all of the issued shares of our Company owned by Coast Exploration Company, being a minimum of 2,000,000 shares and a maximum of 2,400,000 shares. These shares presently reflect control of our company. If Gairloch exercises this option it has agreed forthwith to finance or arrange financing for construction of the Company's helium extraction plant in Saskatchewan which will have a capacity of 40,000,000 cubic feet a year with a cost of \$2,000,000.00 to construct and furnish with all necessary equipment to bring the plant into production.

### **General Information**

Your Directors are of the opinion that the net earnings of your Company will be increased by approximately \$2,000,000.00 per year as a result of the operation of the Frasch sulphur plant on the known deposit. Any additional discovery will, of course, materially improve these earnings. This estimate has been prepared based on Dr. Monture and Mr. Leighton's estimate of operating cost and a general knowledge of the world price for sulphur.

A general commitment has been made to the Mexican Government to construct a fertilizer plant at a freeport in Mexico when and if exports of sulphur from Azufres Anahuac, S.A. exceed one million tons per year.

We have been informed by our tax advisers that dividends from a Mexican corporation to a Canadian corporation which owns more than 26% of the shares of the Mexican corporation are received in Canada tax free by the Canadian corporation.

Your Directors feel that with completion of the matters referred to above the Company, in addition to attaining significance in the world sulphur industry, will be controlled by reputable experienced persons who have access to all necessary financing to maintain the Company as a major producer with the opportunity to acquire further interests in the exploration and development of natural resources products as the occasion may arise from time to time.

Your Board of Directors has given unanimous approval to the transactions contemplated above.

"LOUIS ERLICH",  
*President.*

Toronto, Ontario  
May 30, 1966